
REVENUE SOURCES

The City of Durham uses many revenue sources in financing capital projects. The planned uses of these sources are reflected in the FY 2003 Capital Project Ordinance. The following outline describes the City's major revenue sources:

"Pay-As-You-Go":

This revenue source originates from investment income generated from the General and Capital Projects Funds, or from enterprise fund (e.g., the Water & Sewer Fund) appropriations made in the City's annual operating budget. Typically, these appropriations are transferred to the Capital Projects Fund for accounting purposes if the project period lasts over one fiscal year.

The inclusion of a project in the Capital Improvement Program with either investment income or an enterprise fund appropriations as the funding source shows the intent to include that project in the Annual Budget in the years indicated. However, these funds are not available unless and until they are included in the Annual Budget approved by the City Council.

General Obligation Bond:

The City may borrow money from lenders, pledging the full faith and credit of the City to pay the loan through property tax revenue. This method usually requires voter approval through a referendum and requires approval from the Local Government Commission.

The City's voters approved referenda in May 1986, November 1990, and November 1996 to finance capital projects with General Obligation Bonds. The City sells general obligation bonds once a year to pay for expenses associated with capital projects. Bond sales are expected to be held in January of each year. The City manages its general obligation debt through the use of bond anticipation notes to ensure that we do not incur debt service earlier than necessary and to avoid arbitrage problems.

Revenue Bond:

The City may borrow money from lenders, pledging the revenues from projects that will generate the revenue to pay the debt. Because of the nature of the security, revenue bonds do not require voter approval. Like general obligation bonds, the City sells revenue bonds once a year to pay for expenses associated with capital projects. Bond sales are expected to be held in January of each year.

Installment Sales:

The City may enter into an installment sales contract for a building or for equipment using that building or equipment to secure the financing, similar to a mortgage transaction. The City does not pledge the use of its taxing power to pay the contract. The Local Government Commission must approve the use of installment sales contracts.

Impact Fees:

Impact fees are one-time charges levied against new development based on the impact on City infrastructure as determined by the land use of the project. The impact fees will fund up to one-half the proportionate cost of capital facilities and land made necessary by new construction. Impact fees cannot be used for routine or periodic maintenance, administration of the impact fee program, or improvements made to the existing infrastructure where the improvements are not related to new development.

The fees are collected in three zones for streets, parks and recreation facilities, and open space land: Zone 1 (Southwest Durham), Zone 2 (East Durham), and Zone 3 (North Durham). Impact fees will be used only to serve the zone where the fees were collected. The revenue must be spent within six years; the expenditure of this revenue is programmed with the six-year CIP cycle.

The Council is currently considering a revision to the street impact fee methodology and zones. The CIP will be modified once the new methodology has been adopted. The proposed CIP uses the current street impact fee methodology.

Intergovernmental Revenues:

This category of revenues identifies funding from Durham County, the State of North Carolina, and the Federal government. The funding sources include the State's revolving loan fund for wastewater treatment plants, State and Federal funding for transportation and transit-related improvements, and County funding for the Carolina Theatre.

Future Infrastructure Needs

The Administration has compiled a list of potential future infrastructure needs based on projected growth and development within the City. These needs focus on transportation, public protection, parks and recreation and public works operations infrastructure as they relate to the Capital Improvements Plan.

The most significant applications for new development over the past two to three years have been in the southwest and eastern portions of Durham. The City has received several large development applications for retail, office, mixed-use and residential development.

The proposed CIP does not include any of the projects listed below. The Administration recommends working with the City Council during FY 2002 to begin preliminary discussions of future infrastructure needs and potential sources of financing.

Future water and wastewater infrastructure needs are programmed within the existing CIP. Demands for plant capacity and distribution/collection systems are anticipated within the proposed CIP. City staff regularly updates water and wastewater plans to adjust for growth patterns. Future increases in funding from the Water and Sewer fund may be necessary to respond to increased demand.

Transportation

Citizens have expressed concerns over increased traffic and road congestion. Several large developments in southwest and east Durham are either under construction, approved or going through the development review process. The Administration has developed a preliminary list of future street infrastructure needs based on the City's future traffic pattern model and existing transportation plans. Please see the next page for a summary.

The attached list of future street infrastructure needs was developed using "rule-of-thumb" cost estimates and comparable costs of existing projects. These are preliminary cost estimates only – additional cost refinement and review of the scope of work will be necessary to more accurately identify costs once future projects are approved by the City Council for inclusion in future CIPs.

Public Protection

The proposed CIP includes projected funding for three fire stations – Fire Station #8, Fire Stations #15 and Fire Station #16. Two additional fire stations may be necessary in the future in order to remain at current response times and to respond to increased growth and development. Fire stations generally cost between \$2 and \$2.5 million each. Specific locations and the size/configuration of the stations will be developed based on growth patterns and response times.

The Police Department uses Substations to increase police presence in the neighborhoods and to improve administrative efficiency. An additional substation may be necessary in east Durham in response to increased growth. Most Police Substations are leased office spaces rather than the construction of a City-owned building. Thus, future needs for Police Substations should be handled in the operating budget.

Parks and Recreation and Public Works

The City Council has adopted a ten-year Parks and Recreation Master Plan. The Plan identifies future needs for parks facilities throughout the City, including east and southwest Durham. Future Capital Improvement Plans will incorporate components of the Master Plan depending on staff recommendations and Council priorities.

A satellite Public Works operations center located in east or southwest Durham would improve operational efficiency and effectiveness. The satellite center could have a fueling station, lockers for employees and small equipment storage space. The feasibility, size and scope of such a facility may be considered for the future depending on demands for service from growth and development.

Culture and Recreation

Project Title	Description	Appropriation	Revenue Source	Revenue	Operating Impact
Bethesda Park	Development of a new 19.92-acre park at the end of Cash Road. The park property, acquired in 1999, will include ballfields, playground, picnicking amenities and other program elements that the community specifies. Initial funding is provided for the development of a master plan in conjunction with the community. Design should begin in the first quarter of FY 2003.	100,000			To be determined after completion of master plan.
			Parks/Rec Impact Fees (Zone 1)	100,000	
C.M. Herndon Park	This facility will provide soccer fields and baseball fields. This facility will greatly enhance our youth and adult league activities. The site is already City-owned and is easily accessible to I-40, Hwy. 54, and Hwy. 751. Two private organizations are interested in a long-term development agreement with Durham Parks and Recreation for this site. The Durham Strikers will contribute at least \$500,000 over three years for development and up to \$50,000/year for maintenance. Another anonymous contributor will fund baseball fields.	1,950,000			An additional \$78,000 will be needed upon completion for operation and maintenance in FY 2003-04.
			Grants Fund	500,000	
			Parks/Rec Impact Fees (Zone 1)	1,450,000	
Cook Road Park	This project involves the design and construction of a new park on 8.05 acres of City-owned property on Cook Road in South Durham. The facility will include a playground, picnic shelter, fitness trail, basketball and volleyball courts, parking, and pedestrian walkways. The site was secured through a CDBG grant in 1986. An existing small playground, Willowdale/Sprucewood Park, will be decommissioned once the new park is complete.	810,000			An additional \$10,000 will be needed upon completion for operation and maintenance in FY 2003-04.
			Capital Projects Fund	-	
			Parks/Rec Impact Fees (Zone 1)	569,500	
			CDBG	33,000	
			NC Parks/Recreation Grant	207,500	
Family Life Center at Lyon Park	This project includes the cost of renovating the old Lyon Park Elementary School building. The City and a non-profit organization will jointly operate the Community Family Life Recreation Center. It will provide recreational, educational, community development, health care, job training and human improvement programs. The Parks and Recreation Department also plans to operate programs at this site. This facility will be open by September 30, 2002.	6,750,000			The FY 2002-03 Budget includes an additional \$300,000 for Parks and Recreation staffing and operating expenses and \$344,242 for property maintenance and security.
			General Fund	100,000	
			Investment Income	250,000	
			1996 Parks and Rec Bonds	6,400,000	

Culture and Recreation

Project Title	Description	Appropriation	Revenue Source	Revenue	Operating Impact
Hillside Athletic Complex	Acquisition and development of approximately 42 acres of property currently owned by Durham Public Schools at the new Hillside H.S. The proposed park could accommodate up to 12 soccer fields or a combination of soccer, softball, and other activities. The site is also a proposed trailhead for the American Tobacco Trail and Third Fork Creek Trail. Development of this centrally located complex of multi-functional fields will allow an expansion of our soccer and other league activities.	50,000			An additional \$85,000 per year will be needed for maintenance beginning in FY 2006-07.
			Capital Projects Fund	25,000	
			Parks/Rec Impact Fees (Zone 1)	25,000	
Little River Park	This project includes the development of approximately 52 acres site on Vintage Hill Parkway near Treyburn into athletic fields, playgrounds, trails, and passive open space. This facility will be serve north Durham residents with a variety of league activities. The site could accommodate 4 - 8 soccer fields, allowing for an expansion of the City's soccer and other league activities.	390,000			An additional \$60,000 per year will be needed for maintenance in FY 2003-04.
			1996 Parks and Rec Bonds	62,500	
			Parks/Rec Impact Fees (Zone 3)	265,000	
			Open Space Impact Fees (Zone 3)	62,500	
Park Renovations		5,464,198			Various projects have increased maintenance costs by \$20,000.
			1996 Parks and Rec Bonds	5,464,198	
Playground Renovations		2,377,645			Maintenance and upkeep of the parkland will increase the operating costs by \$7,500 per year for four years.
			Capital Projects Fund	284,645	
			1996 Parks and Rec Bonds	2,093,000	

Project Title	Description	Appropriation	Revenue Source	Revenue	Operating Impact
Pool Replacement	The city currently operates five swimming pools, which are major recreation attractions. Indoor pools are preferred because they offer year-round use with the ability to generate more revenue. This project involves the construction of a new pool facility at Hillside Park and the demolition of the old pool at Duke Park. Also included are pool pack replacements at Campus Hill Pool renovations and Rock Quarry Pool as well as a pump and fence replacement at Long Meadow Pool.	1,641,760			An additional \$37,800 has been added for operation and maintenance of Hillside. Other renovations have resulted in a minor decrease in annual maintenance and repairs.
			1996 Parks and Rec Bonds	1,641,760	
Recreation Center & Ballfield Renovations	Projects include E.D. Mickle HVAC, Floor, and roof replacement; Edison Johnson HVAC and roof replacement; Walltown Recreation Center HVAC replacement; Weaver Street floor replacement; and Campus Hills Chiller and Pump replacement. Includes roof replacements for recreation centers, picnic shelters and bathrooms at multiple small recreation center sites such as Lyon Park, Walltown, East Durham, CR Wood, TA Grady, and West Point on the Eno. Ballfield replacements include Rock Quarry, Walltown, Old N. Durham, Optimist Field, Pineywood Soccer Field, Riverside High School Soccer Field, and Valley Springs Soccer Field.	887,954			HVAC and roof replacement projects will decrease the impact on the operating budget through decreased maintenance and energy costs. However, field replacement will increase the maintenance costs for fields. The overall anticipated net impact is a decrease of \$6,000 per year.
			Investment Income	496,058	
			Capital Projects Fund	391,896	
School Lighting and Storage Improvements	In 1999 the City of Durham and Durham Public Schools passed a resolution to collaborate on joint-use of facilities as an efficient and effective method of maximizing the use of publicly funded facilities. As a part of this effort, the City provided for installation of lights and other site amenities at both Hillside and Riverside High Schools. In January of 2000, the City entered into formal 20 year leases with Durham Public Schools for the Hillside and Riverside campuses. In return for constructing a storage/concession buildings and lighting the fields, the City is guaranteed use of the athletic fields during non-school hours.	520,000			No additional operating impacts are associated with this project.
			Parks/Rec Impact Fees (Zone 1)	200,000	
			Parks/Rec Impact Fees (Zone 3)	320,000	

South Ellerbee Creek Natural Area	This project will provide a neighborhood greenspace for the Old West Durham Neighborhood. This project is contingent upon state or foundation grant funds.	300,000		An additional operating impact of \$2,000 for maintenance is associated with this project.
			Parks/Rec Impact Fees (Zone 3)	75,000
			Open Space Impact Fees (Zone 3)	75,000
			NC Parks and Rec Grant	150,000
Walltown Recreation Center Study	This project will provide for the study of the potential expansion and renovation of the existing recreation center in the Walltown area.	25,000		No additional operating impacts are associated with this project.
			1996 Parks and Rec Bonds	25,000
West Chapel Hill Road Park	This park will be a community park developed on a site adjacent to Githens Middle School. The park will provide future joint recreational use of school and park facilities under an agreement with the Durham Public Schools. Development of the park will provide athletic fields, rest rooms, picnic areas, play areas, and a pool. The Parks and Recreation Master Plan identified this park as the location of a proposed new recreation center/swimming pool serving SW Durham.	1,005,000		An additional \$104,000 will be needed for staffing and maintenance upon completion.
			1996 Parks and Rec Bonds	508,000
			Parks/Rec Impact Fees (Zone 1)	497,000
American Tobacco - NCDOT	The American Tobacco Trail begins at the Durham Expressway, across from the Durham Bulls Athletic Park. Phases A & B were completed and opened in June of 2000. Phase C will continue the Trail from Cornwallis Road to Highway 54 and totals 3 miles. Phase D will parallel Riddle Road from Hillside High School to Briggs Avenue and totals 1.4 miles. Phases C & D will begin construction Summer 2001 and add an additional 4.4 miles. Phase E will continue south to Chatham County, with funding expected to be available from NCDOT in FY 2002. Private developers including Southpointe Crossing and the Villages at Southpointe have built portions of the Trail through their respective properties.	4,070,000		Operating expenses will increase by \$16,000 per year for mowing and upkeep.
			1990 Open Space Bonds	850,000
			1996 Parks and Rec Bonds	84,000
			Open Space Impact Fees (Zone 1)	200,000
			NCDOT	2,936,000

Project Title	Description	Culture and Recreation	Appropriation	Revenue Source	Revenue	Operating Impact
Open Space and Greenway Preservation	<p>The Little Lick Creek Trail will be approximately 11 miles long once completed and will link Birchwood Park, Twin Lake Park, and Southern High School to the Falls Lake State Recreation Area. Right-of-Way acquisition continues along the former Panther Creek railway corridor. Construction will not begin until a safe crossing is provided at Hwy 98 and appropriate routes through regulatory wetlands are determined.</p> <p>The North/South Greenway is a system of trails that runs from West Point-on-the-Eno in the north, to Garrett Road Park in the south, a distance of 12 miles. The trails that comprise the Greenway are, from north to south, the Warren Creek Trail, the Stadium Drive Trail, the Ellerbee Creek Trail, the South Ellerbee Creek Trail, the Downtown Trail, the American Tobacco Trail (Phase A), and the Third Fork Creek Trail.</p> <p>The West Ellerbee Trail will run from Indian Trail Park to Westover Park, cross under I-85, and continue to Northpointe Crossing Shopping Center and link to the North/South Greenway at Stadium Drive, a distance of 1.4 miles.</p> <p>The Rocky Creek/Pearsonstown Trails provide a direct connection to the American Tobacco Trail and the North/South Greenway to the neighborhoods surrounding N.C. Central University, Burton Park, and Campus Hills Park. Sections 2 & 4, totaling 1.6 miles, are complete and begin at Elmira Park. Sections 1 & 3 remain unfunded.</p>	7,883,187				<p>Maintenance and security of this greenway and trail will require an additional \$16,000 per year.</p> <p>Maintenance and security of this greenway and trail will require an additional \$112,000 beginning in FY 2000 with an additional \$100,000 in FY 2003.</p> <p>Maintenance and security of this greenway and trail will require an additional \$8,000 beginning in FY 2002.</p>
				General Obligation Bonds (1986)	374,500	
				General Obligation Bonds (1990)	2,350,000	
				General Obligation Bonds (1996)	2,619,542	
				Capital Projects Fund	34,395	
				Parks/Rec Impact Fees (Zone 1)	1,202,639	
				Parks/Rec Impact Fees (Zone 2)	98,332	
				Parks/Rec Impact Fees (Zone 3)	235,597	
				Open Space Impact Fees - Zone 1	565,491	
				Open Space Impact Fees - Zone 2	135,700	
				Open Space Impact Fees - Zone 3	266,991	

Project Title	Description	Culture and Recreation		Revenue Source	Revenue	Operating Impact
		Appropriation				
Historic St. Joseph's Renovations	Historic St. Joseph's is a facility that serves as a comprehensive cultural arts center, enhancing the understanding and appreciation of the contribution of African-Americans. The St. Joseph's Historic Foundation, a non-profit organization founded in 1975 to restore, preserve and develop this facility, operates the facility. Arts and cultural exhibitions, performances and other arts and cultural activities are featured. This project will provide for major building renovations to the facility.	2,000,000				Operating costs are not anticipated from this project.
		-	1996 Art and Museum Bonds		2,000,000	
Sandy Creek Environmental Center	The Sandy Creek Trail will connect the site of the proposed Environmental Education Center to the Durham Academy Upper School, Cornwallis Road Park, and the Duke Cross-Country Trails, a total of 1.5 miles. Phase I will begin construction in FY 2002 and will include a trailhead with parking, a picnic shelter, restrooms, and a paved trail to Pickett Road, as well as demolition of existing structures remaining from the former wastewater treatment plant.	708,955				Maintenance and security of the trail will require \$40,000 in additional maintenance costs beginning in FY 2001. Sandy Creek Environmental Education Center will require \$44,000 in additional operating costs beginning in FY 2001.
			Water and Sewer Construction Fund		150,000	
			Parks/Rec Impact Fees (Zone 1)		308,955	
			NC PARTF Grant		250,000	
Eno Greenway	The Eno Greenway, a 3.8 mile natural-surface trail that starts at West Point on-the-Eno Park and runs to Penny's Bend Nature Preserve, will be part of the Mountains-to-Sea Trail and the Circle the Triangle Trail. The Greenway would feature a 10' wide natural-surface trail suitable for bicycle and pedestrian use, along the North bank of the Eno River. The Eno Greenway will pass through River Forest Park. As an added benefit, the Eno Greenway will connect to the Warren Creek Trail, the northernmost section of the North/South Greenway. With Whippoorwill Park only 2.3 miles away, the Warren Creek Trail (which is under construction), will allow urban residents easy off-road access to the natural lands along the Eno River to bicyclists and pedestrians.	665,427				Maintenance and security of this greenway and trail will require an additional \$8,000 beginning in FY 2003.
			Federal Enhancement Funds		465,799	
			Parks/Rec Impact Fees (Zone 3)		199,628	
Walltown Children's Theatre	Funds are provided for the purchase of the former St. James Baptist Church to house the Walltown Children's Theatre, a non-profit organization.	125,000				Operating costs are not anticipated from this project.
			Investment Income		125,000	
TOTAL		\$ 37,724,126		\$	37,724,126	

Downtown Development

Project Title	Description	Appropriation	Revenue Source	Revenue	Operating Impact
Foster/Corcoran Realignment	The project will realign Foster and Corcoran Street to allow for a more direct north-south route through the central downtown.	700,000	Investment Income 1996 G.O. Bonds	100,000 600,000	Maintenance of the streets should remain approximately the same as the present maintenance costs.
Chapel Hill/Main St. Improvements	The project will improve traffic and pedestrian flow in the downtown by converting traffic to two-way along Chapel Hill Street/Main Street and installing streetscaping. Streetscaping may include improved lighting, installation of benches, planting of trees and other pedestrian oriented improvements.	3,000,000	Capital Projects Fund 1996 G.O. Bonds	4,004 2,995,996	The project should not have a significant effect on the operating budget upon completion.
Conversion of the Loop	The project will improve traffic flow in the downtown by converting traffic to two-way around the Downtown Loop and installing streetscaping. Streetscaping may include improved lighting, installation of benches, planting of trees and other pedestrian oriented improvements. Current project includes feasibility study, preliminary design and the some right-of-way acquisition. Future funding will be needed for construction.	550,000	1996 G.O. Bonds	550,000	The project should not have a significant effect on the operating budget upon completion.
Parrish Street Redevelopment - Woolworths Demolition	The Woolworth buildings (actually two separate buildings) total about 24,000 square feet on two floors, and were built around 1915. The property was donated to the City from the Woolworth Company in the mid 1990s. The buildings are currently in very poor physical condition. Combined with an adjacent City-owned park, the site totals over half an acre in the core of downtown. Project includes the abatement of lead and asbestos environmental hazards. The existing structures may then be demolished or renovated, to facilitate redevelopment of this highly marketable downtown site. Total project cost to create a redevelopable site is estimated at \$550,000.	600,000	Downtown Revitalization Fund	600,000	No impact is anticipated.
TOTAL		\$ 4,850,000		\$ 4,850,000	

General Services

Project Title	Description	Appropriation	Revenue Source	Revenue	Operating Impact
Braodway Facility Acquisition and Retrofit	The City has purchased the facility located at 213 Broadway Street for a new downtown police substation and the Police Department's identification division.	\$ 1,600,000			
			Installment Sales	1,600,000	
City Hall Office Space Expansion	This project allows for the expansion of use of City Hall. Projects include structural infill on the basement floor, 2 nd Floor and 4 th floor. In addition, a connection would be cut through to link City Hall with the parking under the Planning building. The area currently used for parking under City Hall was originally designed for and lends itself to conversion to office space. Funding is also included for implementing one-stop shopping areas.	4,855,300			The addition of 20,500 sq. ft. of office space will result in \$153,750 in utilities, janitorial and other maintenance costs in FY 2001.
			Water and Sewer Fund	291,300	
			Investment Income	974,000	
			Installment Sales	3,590,000	
City Hall HVAC Replacement & Energy Efficiency Upgrades	Includes the installation of additional capacity for the HVAC system, replacement of inefficient heating and lighting systems, installation of an energy management system, and the installation of an emergency generator. Installation of these systems will result long-term energy savings for the City and increase the reliability of systems in City Hall.	1,050,000			This project will decrease energy costs in City Hall by approximately \$100,000. The HVAC replacement is anticipated to require fewer emergency repairs. Routine maintenance costs will increase by \$15,000 per year.
			Investment Income	260,000	
			Installment Sales	740,000	
			Capital Projects Fund	50,000	
Durham Arts Council Renovations	This project entails the replacement and expansion of the Durham Arts Council Building HVAC system including replacement of the existing chiller, boiler, and ventilation system and installation of an emergency management system. The current system is inadequate for the facility, experiencing frequent breakdowns and repairs. The building has experienced some damage due to humidity fluctuation. The Durham Arts Council Building, which houses the Durham Arts Council, is owned by the City of Durham.	223,915			There should be an insignificant effect on the operating budget upon completion of this project.
			General Fund	20,500	
			Capital Projects Fund	80,000	
			Investment Income	123,415	
Enterprise Resource Planning System	This project will implement an Enterprise Resource Planning (ERP) system that will replace the current financial accounting and reporting, billing, and human resources systems. The current system is over 15 years old, utilizes outdated technology, and is inefficient. The ERP system will expand accessibility, including Internet access for all users. The project also includes a data warehousing solution that allows integration of all other systems in the City with the ERP system so users will be able to generate reports using data from all of the City's systems. Current funding provides for initial assessment. Total cost is estimated at \$5 to \$8 Million.	260,000			Once implemented, the system will increase costs by \$160,000 per year due to additional information technology personnel.

General Services

Project Title	Description	Appropriation	Revenue Source	Revenue	Operating Impact
			Capital Projects Fund	260,000	
Fay Street Maintenance Facility	This Fay Street facility will replaced the aging and functionally obsolete maintenance structures in current use. The City will achieve operational efficiencies such as utility cost savings, shared facilities, manpower allocation and equipment sharing among campus stakeholders (various departments) through consolidation of maintenance operations and administrative functions into one central facility. All Properties and Facilities Management divisions will be accommodated at this 50,000 sq. ft. facility (except Fleet Maintenance). These include: carpentry, painting, welding and other general maintenance and repair operations, building renovations, park maintenance, grass mowing and landscaping. Design will also accommodate expansion.	7,100,000			Operating expenses at the new facility will be \$100,000. In addition, expenses at the Broadway facility are \$180,000 per year. The net operating effect of the new facility, therefore, expenses decreased by \$80,000 in FY 2002.
			Installment Sales	7,100,000	
Fleet Maintenance Tire Storage	This project involves the construction of three (3) 24' x 38' heavy/medium truck and equipment tire storage rooms. These rooms are to be built onto the existing tire room at Fleet Maintenance. Total square footage is 2,880. Heavy/medium truck and equipment tires are presently being stored inside the stockroom. We have been informed by City Fire Inspectors that we are in violation of National Fire Codes with this practice. Fleet's present tire room is too small to accommodate the necessary number of large tires needed to support the City's fleet of heavy/medium trucks and equipment.	321,593			The addition of this storage facility will increase the operating costs associated with maintenance by \$2,000 per year.
			Capital Projects Fund	201,600	
			Investment Income	119,993	
Public Service Natural Gas Co. Building Acquisition	This project involves the acquisition and upfit of the former Public Service Gas Co. Building at 400 Cleveland Avenue. This facility will house the Employee Training and Development division of the Human Resources Department and the Parks and Recreation Department.	970,000			
			Installment Sales	970,000	
Solid Waste Administration Building	This facility houses the administrative offices of the Solid Waste Collections Department.	5,231,879			
			1990 G.O. Bonds	5,231,879	
Solid Waste Management Projects	Funds are provided to construct a transfer station and purchase solid waste collection equipment.	44,173,121			
			1986 G.O. Bonds	4,205,000	
			1990 G.O. Bonds	39,968,121	
TOTAL		65,785,808		65,785,808	

Housing and Neighborhood Development

Project Title	Description	Appropriation	Revenue Source	Revenue	Operating Impact
Affordable Housing	Projects in this category include all housing activities and neighborhood redevelopment projects. In 1990, voters approved \$15 million to continue the City's affordable housing program. The City currently has \$20 million in 1996 General Obligation Bond authority, approved by the voters in November 1996. Projects included in this category are designed to assist with providing housing for low- and moderate-income individuals and families through the acquisition of land for housing development, housing rehabilitation and assistance programs. Loan repayments from affordable housing projects have also been use to finance additional projects. Many of the department's housing activities are conducted through competitive Requests for Proposals (RFP).	\$ 47,000,750			Operating costs are not anticipated from affordable housing projects.
			1990 Housing Bonds	15,000,000	
			1996 Housing Bonds	20,000,000	
			Loan Repayments	11,687,165	
			Land Sales	275,009	
			Rental Income	38,576	
TOTAL		\$ 47,000,750		\$ 47,000,750	

Public Protection

Project Title	Description	Appropriation	Revenue Source	Revenue	Operating Impact
Backup 911 Center	Project includes renovation of an existing facility on the campus of Duke University. The existing facility is 3,589 sq. ft. and is located in Duke Parking Garage #3 on Fulton Street. This Backup Center will be used in the event of natural disasters, equipment malfunctions or any event requiring relocation.	\$ 889,000	Capital Projects Fund General Fund Durham County Duke University	439,000 225,000 145,000 80,000	Once in operation, this project will require \$90,500 for operating expenses.
Fire Station #8	Fire Station 8 will serve the far eastern area of the City. The fire station will be a two-bay, 6500 square foot station with separate accommodations for four firefighters per shift. The station will also contain a training/community meeting room. The relocation of this station will improve the coverage area, reduce service response area overlap and improve an area that the City lost points on in terms of ability to meet response standards in the most recent ISO review. The engine company that currently services this area is housed with fire station # 3 at 822 N. Miami Blvd.	1,450,000	Installment Sales Investment Income	1,430,000 20,000	Additional operating expenses are anticipated at \$13,000 per year for facility maintenance and utilities. No additional dollars are needed for personnel. Fire station #8 will be housed with existing staff.
Fire Station #16	This station will serve the southwestern area of the City. The fire station will be a two-bay, 6500 square foot station with separate accommodations for firefighters. The station will also have a training/ community meeting room. The project will include 21 firefighters and one combination pumper/ladder truck.	200,000	Future Installment Sales	200,000	This project will have an additional operating impact of \$739,500 per year. This fire station will be staffed with 21 firefighters.
911 Radio Equipment Upgrade	This project includes the upgrade and replacement of existing 911 dispatch equipment. Dispatch equipment is used to service emergency response vehicles throughout Durham County. The purpose of this project is to replace equipment before it becomes functionally obsolete.	27,500	911 Surcharge	27,500	Once completed, this project will have no impact on the operating budget.
Police Headquarters HVAC and Indoor Air Quality	Renovations include heating system/boiler replacement, duct work, and HVAC/chiller improvements/inspections at the Police Headquarters Building.	200,000	Capital Projects Fund	200,000	This project will have no operating impact.
TOTAL		\$ 2,766,500		\$ 2,766,500	

Transportation

Project Title	Description	Appropriation	Revenue Source	Revenue	Operating Impact
Fayetteville Road Widening	This project funds the cost of widening Fayetteville Road to a multi-lane facility between Hwy 54 and Woodcroft Parkway, in order to accommodate the potential development in this corridor.	6,500,000			Upon full completion, this thoroughfare will be on the State Highway System and NCDOT will reimburse the City for any maintenance expenses. However, acceptance of this street by NCDOT may result in the City assuming maintenance costs for other streets currently on the State Highway System.
			1996 G.O. Bonds	3,000,000	
			Street Impact Fees - Zone 1	3,500,000	
Federal and State Match Projects	Funds for this project will be used to match available Federal and State transportation funds. Projects that would be undertaken include new brick noise barrier-walls along major highways, extension of State-constructed noise barrier walls, highway landscaping, roadway extensions, sidewalks adjacent to and near major highways, bicycle lanes, intersection improvements and protective right-of-way acquisitions for planned thoroughfare improvement projects.	4,509,275			The Federal and State Matching Projects item contains several different types of projects. Operating impacts will vary by each project.
			Capital Projects Fund	340,000	
			1996 G.O. Bonds	2,437,275	
			Street Impact Fees - Zone 3	100,000	
			Federal Match	1,632,000	
Martin Luther King Jr. Parkway	This project includes the right-of-way acquisition, design and construction of a four-lane street through southern Durham. It will connect U.S. 15-501 near the South Square Mall area with the Research Triangle Park, providing traffic service across the entire southern area of the City and will have a carrying capacity of approximately 28,000 vehicles per day. This project provides for the construction costs of three major segments of Martin Luther King, Jr. Parkway: 1) widening of Archdale Road to four lanes from Chapel Hill Road to Hope Valley Road (N.C. 751), 2) four lanes from Hope Valley Road (N.C. Highway 751) to Cook Road, and 3) the widening of the Cook Road to NC Highway 55 segment to four lanes. This project also includes funds for the purchase of some rights-of-way for the future N.C. 55 to Cornwallis Road segment.	14,270,004			The estimated annual cost of maintaining this street upon completion is approximately \$21,000. Upon full completion, this thoroughfare will be on the State Highway System and NCDOT will reimburse the City for any maintenance expenses. However, acceptance of this street by NCDOT may result in the City assuming maintenance costs for other streets currently on the State Highway System.
			1996 G.O. Bonds	8,270,004	
			Street Impact Fees - Zone 1	6,000,000	

Transportation

Project Title	Description	Appropriation	Revenue Source	Revenue	Operating Impact
Traffic Signal System Upgrade	This project includes a replacement computer, software, and communications hardware for the City's Traffic Control System and installation of 80 pedestrian signals. The current traffic control computer in City Hall reached its 15-year design life in 1992 and is not operating efficiently. The upgraded traffic control system will provide for efficient functioning of the entire street network and will contribute to an improvement in air quality in this area. Funds (\$200,000) have been included to expand the number of intersections installed with Sydney Coordinated Adaptive Traffic System (SCATS) control capability to include those along Miami Blvd. between I-40 and US 70. SCATS is an intelligent traffic control system that automatically adapts traffic signal timing according to traffic conditions at each intersection.	2,568,500			In FY 1995-96, the City hired one staff person at a cost of \$40,000 to coordinate activities during the design phase of the project. NCDOT has assumed 84% of the cost. The remaining 16% of this cost is included in the Transportation annual budget. A maintenance reimbursement agreement will be negotiated in FY 2002.
			Investment Income	200,000	
			General Fund	214,000	
			Capital Projects Fund	126,000	
			1996 G.O. Bonds	1,955,000	
			N.C. DOT	73,500	
Traffic Calming	This project includes the implementation of speed reduction measures, such as speed humps, traffic diverters and roundabouts. Recently, traffic calming has increased in popularity due to its effectiveness in slowing down speeding vehicles and making neighborhoods more pedestrian friendly. Many citizens have petitioned the City to install speed humps on City-maintained streets in their neighborhoods.	660,000			The project should not have a significant effect on the operating budget upon completion.
			Investment Income	460,000	
			1996 G.O. Bonds	200,000	
Street Paving	Street paving funds are used Citywide to pave dirt streets and to install curb and gutter on strip-paved streets. There are two types of street paving projects: 1) those requested by citizen petition and 2) those ordered by the City Council under Enabling Act authority. Through the street paving program, safety and standards of living are improved.	9,391,572			Paving of dirt streets reduces street maintenance costs. The annual cost for street maintenance per square mile of dirt streets is approximately four times the annual cost per mile for paved streets.
			1990 G.O. Bonds	641,572	
			1996 G.O. Bonds	8,750,000	

Transportation

Project Title	Description	Appropriation	Revenue Source	Revenue	Operating Impact
Miscellaneous Thoroughfares and Street Improvements	This project provides funding to construct missing segments of thoroughfares between those segments built by developers, joint-venture financing with developers for major thoroughfares. This project also provides funding for transportation system management projects, such as intersection widening and turn lane additions and bike route improvements. Expenditures for this project may be eligible for funding from impact fee revenues collected in all zones. This project also provides for miscellaneous improvements that mitigate areas of traffic congestion or areas that experience high accident rates. Examples of such remedies include new traffic signals, traffic signal upgrades, and railroad crossing improvements.	3,666,438			There should be an insignificant impact on the operating budget upon completion of small projects funded through this program.
			Investment Income	49,190	
			Rental Income	23,532	
			Sale of Land	10,210	
			NCDOT	123,023	
			Capital Projects Fund	694,858	
			1996 G.O. Bonds	1,666,725	
			Street Impact Fees - Zone 1	917,500	
			Street Impact Fees - Zone 2	32,400	
			Street Impact Fees - Zone 3	149,000	
Stadium Drive Extension	This project will extend Stadium Drive between Broad Street and Kirkwood Drive including two lanes of paved road with turn lanes. This street extension will relieve traffic congestion and, subsequently, air quality degradation resulting from traffic congestion.	2,970,000			The project should not have a significant effect on the operating budget upon completion.
			1996 G.O. Bonds	1,020,000	
			Street Impact Fees - Zone 3	1,950,000	
Garrett Road Extension	The project includes the design and construction costs of the Garrett Road Extension, a five lane curb and gutter street with from Hope Valley Road (N.C. 751) south to N.C. 54. The project will be on new right-of-way dedicated by developers. The purpose of the project is to relieve existing and projected traffic congestion and is an element of the Thoroughfare Plan and Southeast Durham Transportation Study.	300,000			The project should not have a significant effect on the operating budget upon completion.
			1996 G.O. Bonds	300,000	

Transportation

Project Title	Description	Appropriation	Revenue Source	Revenue	Operating Impact
Sidewalk Replace & ADA Compliance	This project includes the repair and replacement of deteriorated sidewalks. Existing sidewalks within the City limits on public right of way will be repaired or replaced. A sidewalk survey conducted by UNC's Institute of Transportation Research and Education identified \$1.3 million of needed sidewalk repairs. The total need is estimated to be in excess of \$2 million. Repair and replacement of deteriorated sidewalks will improve pedestrian safety, provide greater accessibility, and improve appearance. This project also involves the construction of curb wheelchair ramps throughout the City to comply with the Federal Americans with Disabilities Act (ADA). This is a long-range and on-going project.	1,507,600			The project should not have a significant effect on the operating budget upon completion.
			Investment Income	204,200	
			Capital Projects Fund	1,303,400	
New Sidewalk Construction	This project includes funding for the construction of the City's adopted sidewalk construction program and those requested by citizen petition. This project will improve pedestrian safety, encourage walking, provide better pedestrian access to bus stops, and improve the City's appearance. This is a long-range and on-going project. The new sidewalks constructed with 1996 Bonds are well underway.	4,259,000			The project should not have a significant effect on the operating budget upon completion.
			Investment Income	2,100	
			Capital Projects Fund	756,900	
			1996 G.O. Bonds	3,500,000	
Multi-Modal Transportation Center	This project includes architectural design, land acquisition, and construction of a new multi-modal transportation center. A site along Pettigrew Street, which is the location of Ferguson's Plumbing, the former Merchant's tire facility, and the former White Optical building, has been identified for the facility. Possible users of the facility include Amtrak, inter-city buses, regional transit, taxi/limousine service, and car rental establishments. This project is included in the North Carolina Department of Transportation's Transportation Improvement Program. Federal and State matching funds may change depending on design of the facility. The planned North Parking Garage for the American tobacco Complex is adjacent to the Multi-modal Transportation Center site. An additional \$6 million in Federal and State funds is anticipated to be available.	6,700,691			There will be utility and maintenance costs associated with this building upon completion. The costs will be determined once the design is complete.
			1996 G.O. Bonds - Transp.	5,165,000	
			Federal Match	1,151,768	
			N.C. DOT	383,923	
Total		57,303,080		57,303,080	

Water

Project Title	Description	Appropriation	Revenue Source	Revenue	Operating Impact
Asbestos Cement Line Replacement	The Asbestos Cement Line Replacement project provides funds for the replacement of asbestos cement water distribution lines that have been purchased from the Orange Water and Sewer Authority (OWASA) and private systems. Environmental Protection Agency regulations will not allow new asbestos cement pipe to be installed after 1995. Existing regulations allow existing asbestos cement pipe to remain in use. However, the failure rate of the pipe, the difficulty repairing the pipe, the potential dangers in making the pipe, and the probability that new regulations will require removal justify the replacement of pipe installed prior to 1995.	1,450,000			The project should not have a significant effect on the operating budget upon completion.
			Water and Sewer Construct. Fund	250,000	
			Revenue Bonds	1,200,000	
Brown Water Treatment Plant Expansion and Rehabilitation	Peak demand in 1997 exceeded 80% of Durham's total plant capacity. Although this does not represent an emergency situation, the City should proceed expeditiously to make sure additional capacity is available before peak demands get too high. The project expands the Brown Water Treatment Plant from 30 million gallons per day to 39 million gallons per day. The Brown Plant already has many of the components necessary for a 9 MGD expansion, so the cost per million gallons of capacity should be low. The Brown Water Treatment Plant, built in 1976 and expanded in 1992, also needs improvement in several areas of the original plant. Planned improvements include HVAC replacements, plant drive reconstruction, ADA improvements, chemical process improvements, plant piping improvement and additional buffer land acquisition. Completed improvements include sewer and process improvements, new reduced voltage starting systems for the high service pumps, and expanded plant buffer acquisition.	6,431,282			The treatment of additional water through the Brown Plant will result in an incremental increase in corresponding electrical and chemical costs.
			Water and Sewer Operating Fund	3,731,282	
			Water and Sewer Construct. Fund	500,000	
			Revenue Bonds	1,600,000	
			State Loan	600,000	
Durham County Line Extensions	Durham County is installing water and sewer lines in areas outside of the City Limits. The City of Durham has entered into an agreement to assume ownership of the lines after installation is complete.	34,000,000			The project should not have a significant effect on the operating budget upon completion.
			Durham County	34,000,000	

Water

Project Title	Description	Appropriation	Revenue Source	Revenue	Operating Impact
Finished Water Storage	State regulations require water utilities to have finished water storage equal to one half of the average daily demand. With a 1997 average daily demand of approximately 29 million gallons, the City's combined water storage barely meets the minimum required storage. Increased storage will increase pumping efficiency and provide for additional available water for emergencies. Future years' funding is necessary to acquire land for, design, and construct a new 2 million gallon elevated storage tank on the distribution system. In addition, the need for a new 5 million gallon clearwell at the Brown Water Treatment Plant will be evaluated as a part of the Brown Plant Expansion design.	789,473			Additional finished water storage will provide some savings in electrical expenses as a result of pumping more water at off-peak times of the day or night.
			Water and Sewer Operating Fund	389,473	
			Water and Sewer Construct. Fund	400,000	
Future Water Supply/Quality Protection	This project provides funds to acquire land for the City's future water supply needs and to preserve the quality of current water supply sources. Even with Lake Michie and Little River reservoirs, combined capacities may be inadequate by the year 2010. Construction of a third reservoir, or expansion of an existing one, should begin by 2005. The lead time involved in planning and permitting a new or expanded water supply makes it necessary to be working on the preliminary phases now. This is an ongoing project to buy needed property as it becomes available.	4,269,159			The project should not have an impact on the operating budget.
			Water and Sewer Operating Fund	1,350,000	
			Water and Sewer Construct. Fund	508,078	
			Revenue Bonds	1,250,000	
			Future Revenue Bonds	1,000,000	
			Land Sale Proceeds	161,081	
Pitometer Water Distribution	The Water Distribution Study will be a detailed and complete analysis of the City's Water Distribution System. The study will encompass developing a Water System Master Plan which will be utilized by City staff in planning, scheduling, budgeting and designing water system improvements as the service area is developed. As part of the study comprehensive water distribution and water quality computer model will be created. In addition, the study will make recommendations for water storage and reinforcing mains in the system.	500,000			The project should not have a significant effect on the operating budget upon completion.
			Water and Sewer Construct. Fund	200,000	
			Revenue Bonds	300,000	

Water

Project Title	Description	Appropriation	Revenue Source	Revenue	Operating Impact
Teer Quarry Water Storage Development	The Teer Quarry Water Storage Development project involves the conversion of the Teer Quarry into an off-stream, three billion gallon raw water reservoir. A proposed agreement is being negotiated to allow the City to acquire the site within 15 years or at the cessation of active Quarry operation. Some adjoining property will also need to be purchased to ensure contiguous property between the quarry and the current Eno Wastewater Treatment Plant.	200,000			This project should not have an effect on the operating budget at this time. However, personnel and resources will be needed to operate the reservoir. Those cost estimates will be made once the planning stage is complete.
			Revenue Bonds	200,000	
Two-Inch Water Main Replacement	This project strengthens the water distribution system by replacing existing two-inch water mains with larger mains to provide improved fire protection and greater capacity with less maintenance.	2,488,000			This project should slightly decrease operating expenses due to a corresponding decrease in the number of repairs to existing mains.
			Water and Sewer Operating Fund	1,160,612	
			Revenue Bonds	1,027,388	
			Future Revenue Bonds	300,000	
Water Lines Extensions and Improvements	The Water Lines Extension and Improvements project includes several programs aimed at expanding the water distribution system. Constructing water lines as requested by petitions, constructing water lines using the City's Enabling Act authority, reimbursing developers for water system improvements, and making water system improvements in advance of street paving are all included in this project. This project includes funds to extend or improve water lines within City-initiated annexation areas and projects related to N.C. Department of Transportation.	15,128,739			A marginal increase in operating expenses is expected due to the increase in the amount of water lines being maintained.
			Water and Sewer Operating Fund	4,425,739	
			Water and Sewer Construct. Fund	1,519,940	
			Revenue Bonds	8,183,060	
			Future Revenue Bonds	1,000,000	
Williams Water Treatment Plant Rehabilitation Phase IV	The Williams Water Treatment Plant has been undergoing Storage Renovations for several years. The project has included several phases for limited rehabilitation of the plant, including filter reconstruction, sludge handling and dewatering and rapid mix and flocculation retrofits. The project is in the last planned initiative (Phase IV), which includes new disinfection facilities, major electrical upgrades, architectural improvements and some interior building renovations.	15,785,500			The project should not have a significant effect on the operating budget upon completion.
			Water and Sewer Operating Fund	4,345,389	
			State Loan	2,100,000	
			1986 Water Bonds	3,440,111	
			Revenue Bonds	3,900,000	
			Installment Sales	2,000,000	

Water

Project Title	Description	Appropriation	Revenue Source	Revenue	Operating Impact
Lake Michie Dam Renovations	The Lake Michie Dam Renovation project will assess the condition of the Lake Michie Dam. Renovations and general maintenance, including painting, concrete repairs, and selected value replacements, will be completed. This project is nearly complete, with the major work done and primarily minor projects remaining. The project will complete some additional repairs to the spillway and earth embankment.	300,000			The project should not have a significant effect on the operating budget upon completion.
			Revenue Bonds	300,000	
Water Pilot Plant	Through the Safe Water Drinking Act, the U.S. Environmental Protection Agency has recently announced new mandates for water treatment processes that are in the process of being promulgated. The construction of a pilot water plant will allow for investigation of treatment processes which can meet the new regulations in the most cost-effective manner. Bench testing and engineering evaluations are ongoing.	650,000			The project should not have a significant effect on the operating budget upon completion.
			Water and Sewer Operating Fund	350,000	
			Revenue Bonds	300,000	
Raleigh Emergency Water Interconnection	This project would construct a small interconnection to the City of Raleigh's water system to allow Durham and Raleigh to provide each other water in case of emergency situations. The City of Raleigh is the only surrounding water system capable of supplying Durham's daily water demand. In the future, the City may study the feasibility of larger water main interconnections at other points in the water system.	750,000			The project should not have a significant effect on the operating budget upon completion.
			Revenue Bonds	750,000	
Southern Reinforcing Main	The Southern Reinforcing Main project will provide a 36-inch water line from Pettigrew Street, where the Eastern Reinforcing Main ends, along the Expressway to the Research Triangle Park. The project is necessary to meet the maximum daily demands of the water distribution system and to be able to pump the capacity of the Brown Water Treatment Plant to the entire system.	900,000			The project should not have a significant effect on the operating budget upon completion.
			Water and Sewer Operating Fund	500,000	
			Revenue Bonds	400,000	
TOTAL		\$ 83,642,153		\$ 83,642,153	

Wastewater

Project Title	Description	Appropriation	Revenue Source	Revenue	Operating Impact
North Durham Water Reclamation Facility, Plant A	This project provides for renovations to the older portion of the North Durham Water Reclamation Facility (NDWRF). Renovations include concrete tank repairs, electrical and heating and cooling system replacements, methane gas storage improvements, and road reconstruction. This portion of NDWRF is an integral part of the facility's overall treatment capacity and needs to be maintained to insure the availability of full capacity at this location. Full capacity is 20 million gallons per day.	1,500,000			The project should not have a significant effect on the operating budget upon completion.
			1990 Sewer Bonds	1,500,000	
Sewer Lines Extensions and Improvements	The Sewer Lines Extensions and Improvements projects include several programs aimed at expanding the wastewater collection system. Constructing sewer lines as requested by petitions, constructing sewer lines using the City's Enabling Act authority, reimbursing developers for wastewater system improvements, rehabilitating wastewater lines, and making wastewater system improvements in advance of street paving are all included in this project. This project includes funds to extend or improve wastewater lines within City-initiated annexation areas and projects related to N.C. Department of Transportation.	8,732,554			A marginal increase in operating costs is expected due to the increase in the number of sewer lines being maintained.
			Water and Sewer Construct. Fund	1,704,000	
			Revenue Bonds	6,028,554	
			Future Revenue Bonds	1,000,000	
Sewer Pump Station Removal	The sewer pump station removal project will remove those pumping stations in the City's sewer collection system that are located close to existing sewer outfalls. Short extensions from existing outfalls will replace the need for the stations. The City currently maintains 52 pumping stations. Removal of those designated stations will reduce operating and maintenance costs.	977,393			Removal of the designated sewer pump stations will decrease maintenance costs. Staff projects a potential cost savings of \$16,300 per pump station per year.
			Water and Sewer Operating Fund	408,660	
			Water and Sewer Construct. Fund	113,733	
			Revenue Bonds	455,000	
Sewer Rehabilitation	The Sewer Rehabilitation project involves the restoration of portions of the City's sewer by repairing, cleaning, and replacing mains and outfalls. Flow monitoring and television examination of problem areas are on-going. As monitoring and inspection continue, identified areas will be rehabilitated with the major construction performed by contract. The monitoring, inspection, and some joint repair will be accomplished in-house. Maintenance flow studies, some point repairs, interior lining, and grouting will be completed by contract. The goal of the project is to eliminate water infiltration in the sewer lines for a 3 inch rainfall (or a 10-year storm event).	15,873,593			Rehabilitation of the sewer collection system will decrease treatment costs. For every 5% reduction in wastewater flow, staff projects a potential annual decrease of \$16,150 in chemical and electrical costs.

Wastewater

Project Title	Description	Appropriation	Revenue Source	Revenue	Operating Impact
Sewer Rehabilitation (con't)			Water and Sewer Operating Fund	500,000	
			Water and Sewer Construct. Fund	2,843,110	
			Revenue Bonds	10,530,483	
			Future Revenue Bonds	2,000,000	
Sludge Treatment and Disposal	The Sludge Treatment and Disposal System project will develop additional biosolid (sludge) processing and disposal facilities to both North Durham and South Durham Water Reclamation Facilities. Facilities include additional thickening and dewatering facilities, anaerobic digesters, and other biosolids processing equipment. These facilities are needed to ensure adequate biosolid processing as required by state and federal regulations.	26,272,718			The project should not have a significant effect on the operating budget upon completion.
			1986 Sewer Bonds	1,400,000	
			1990 Sewer Bonds	24,872,718	
Engine Replacement - South Durham Water Reclamation Facility	The replacement of the engine at the SDWRF is needed because of the age and wear since it began operation in 1984. The engine is no longer in production and parts are scarce. It has over 99,000 operational hours and needs major work and is currently having "oil blow-by" problems. If compared to a normal automobile, a vehicle traveling at 30 mph would have traveled almost 3 million miles. This engine utilizes digester gas to provide air for the aeration process, heat for the building and digester heat, the loss of which would cost \$3000 - \$5000 per month in electricity alone.	300,000			The project should not have a significant effect on the operating budget upon completion.
			Water and Sewer Operating Fund	300,000	
TOTAL		\$ 53,656,258		\$ 53,656,258	